# USAS X4.6-1966

10-Key Keyboard for Adding and Calculating **Machines** 

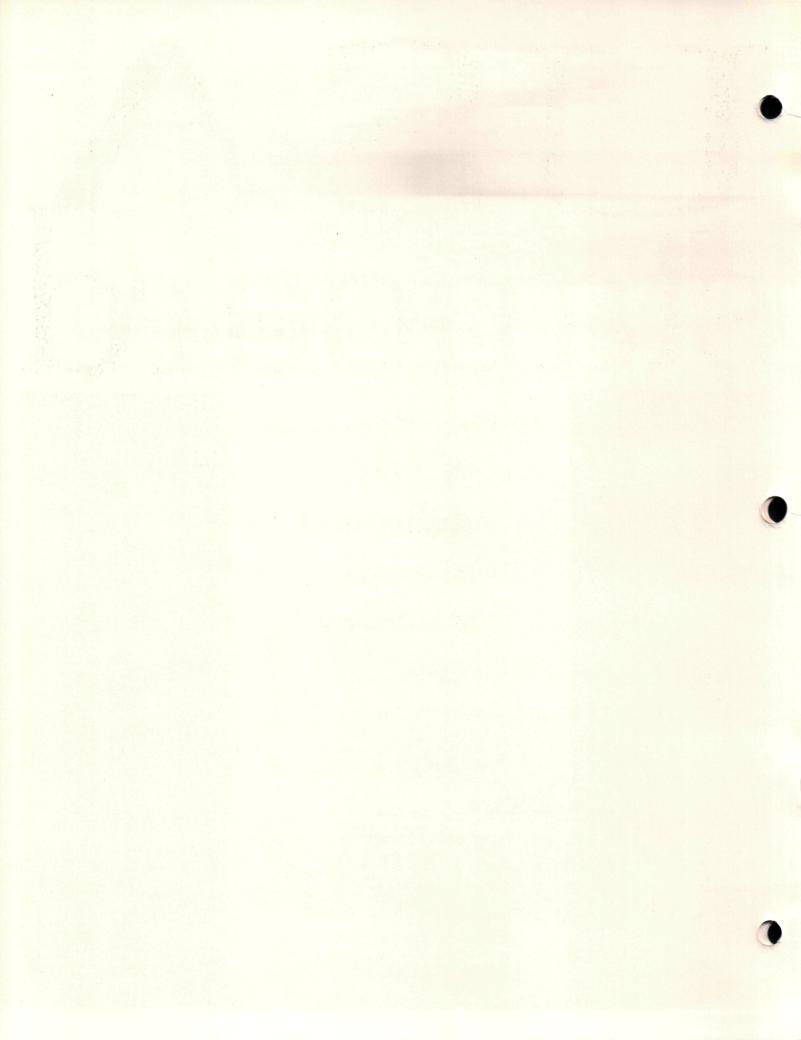
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X4.6 1966

# American National Standard

This standard is one of more than 4000 approved as either a USA Standard or as an American Standard. It became an American National Standard in October 1969 when the Institute changed its name to American National Standards Institute, Inc.

ANSI, 1430 Broadway, New York, N.Y. 10018



# **USA Standard**

# 10-Key Keyboard for Adding and Calculating Machines

Sponsor

**Business Equipment Manufacturers Association** 

Approved September 30, 1966 United States of America Standards Institute

#### **USA Standard**

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## **Foreword**

(This Foreword is not a part of the USA Standard 10-Key Keyboard for Adding and Calculating Machines, X4.6-1966.)

This USA Standard presents the standard 10-key configuration for adding and calculating machines of the 10-key type. It recognizes the existing national and international de facto standard practice of arranging the numerics in ascending order that has been followed for many years.

The 10-key arrangement was developed from research, review of historical work, and careful consideration of the use of numeric keyboards and their arrangement on office machines of all types.

Suggestions for improvement gained in the use of this standard will be welcomed. They should be sent to the United States of America Standards Institute, 10 East 40th Street, New York, N.Y. 10016.

The ASA Subcommittee on Adding Machines and Calculators, X4-A2, of the Sectional Committee on Office Machines, X4, which developed this standard, had the following personnel at the time of approval:

V. S. Johnston, Chairman

J. P. Ancona F. O. Bias W. H. Burkhart T. M. Butler D. S. Gross G. F. Kohls H. Meier J. M. Weiss

# **USA Standard**

# 10-Key Keyboard for Adding and Calculating Machines

### 1. Scope and Purpose

- 1.1 Scope. This standard prescribes the arrangement of the 10 numeric keys, one through zero, for adding and calculating machines of the 10-key type.
- 1.2 Purpose. This standard is intended to cover only the physical arrangement of numerical keys within keyboards of this type. It is not intended to influence key button shapes or dimensions.

## 2. Standard Arrangement

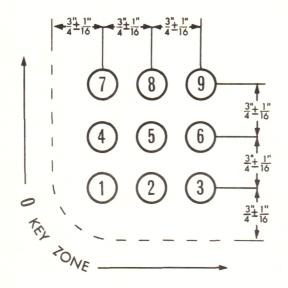


Fig. 1
Physical Arrangement of Numerical Keys

**2.1** The center-to-center spacing of all numerical keys shall be  $\frac{3}{4}$  in.  $\pm \frac{1}{16}$  in. as illustrated in Fig. 1.

- 2.2 The keys from "1" to "9" shall be arranged in a 3 by 3 matrix with the "1", "2", and "3" keys in the first row as illustrated in Fig. 1.
- 2.3 The "0" key, or keys, shall be located adjacent to the base matrix and maintain the  $\frac{3}{4}$  in.  $\pm \frac{1}{16}$  in. spacing as illustrated in Fig. 1.

#### 3. Terms and Definitions

- 3.1 Numerical Keyboard: the arrangement of keys used to enter digital values into adding and calculating machines.
- 3.2 Ten-Key Keyboard: a numerical keyboard which provides only one set of keys for entering digital values from 0 to 9. On this type of keyboard, amounts are entered one digit after the other starting with the digit of the highest order and finishing with the digit of the lowest order.
- 3.3 Numerical Key: an individual depressable element which represents a digital value.

#### 4. Qualifications

- 4.1 This standard does not include key button shapes, dimensions, or the manner in which the numerals are to be inscribed on the keys.
- 4.2 The decision to propose this existing world-wide de facto standard arrangement was made only after a thorough study of other 10-key arrangements. This study produced no evidence that such arrangements provide significant advantages in speed or reduction in keying errors to justify the retraining of the large number of operators throughout the world who now operate 10-key adding and calculating machines by the "touch system."